

The Nova Scotia Medical Bulletin

OFFICIAL ORGAN OF THE MEDICAL SOCIETY OF NOVA SCOTIA
CANADIAN MEDICAL ASSOCIATION NOVA SCOTIA DIVISION.

JUNE, 1946

Editorial Board, Medical Society of Nova Scotia

DR. MARGARET E. B. GOSSE, Halifax, N. S.
Editor-in-Chief

DR. H. L. SCAMMELL, Halifax, N. S. DR. C. M. BETHUNE, Halifax, N. S.
and the Secretaries of Local Societies.

Published on the 20th of each month and mailed to all physicians and hospitals in Nova Scotia. Advertising forms close on the last day of the preceding month. Manuscripts should be in the hands of the editors on or before the 1st of the month. Subscription Price:—\$3.00 per year.

It is to be distinctly understood that the Editors of this Journal do not necessarily subscribe to the views of its contributors.

1. Manuscripts should be typewritten, on one side only of the paper and double spaced.
2. Should proof be sent to a contributor, corrections must be clearly marked and no additional matter added.
3. Orders for reprints should accompany the proofs.
4. Communications should be sent to the Secretary, Dr. H. G. Grant, Dalhousie Public Health Clinic, Morris Street, Halifax, N. S.
5. Please mention the BULLETIN when replying to advertisements.

Contents June, 1946

SCIENTIFIC:

Of Interest to Dalhousians Old and New—John R. MacLeod, Halifax, N. S.	185
Pneumococcal Meningitis—Case Reports—C. B. Greene, M.D., Halifax, N. S.	192
The Work of the Air Evacuation Section Overseas—E. P. Nonamaker, M.D., Halifax, N. S.	196
“Postnasal Drip”—Reprinted, Arthur W. Proetz, M.D., St. Louis, Missouri	198
Hostile Dependent Behavior in Rehabilitation—Reprinted, Alfred P. Solomon, M.D., Chicago, Illinois	202

ABSTRACTS FROM CURRENT LITERATURE:

By E. D. Sherman, M.D., Sydney, N. S.	
Pyridoxine (Vitamin B6) in Granulocytopenia	211
Bacteriologic Aspects of Penicillin Therapy	211
War-time Toxic Diffuse Goiter	212
Mechanism of Shock from Burns and Trauma	212
Testosterone Propionate in Mammary Cancer	213
Caysalgia	213
Functional Enuresis in the Army	213
Treatment of Ameduasus	214
Prophylaxis and Treatment of Ricketts	214

PERSONAL INTEREST NOTES

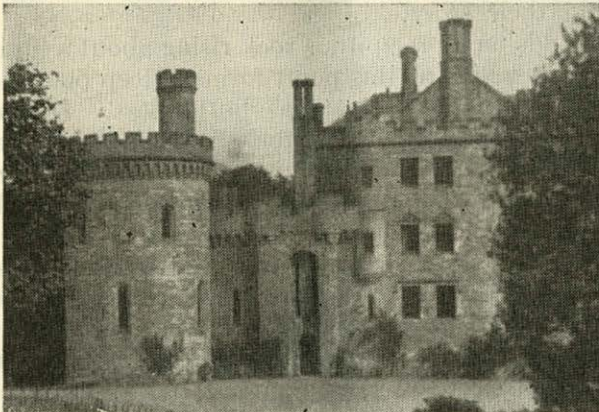
V. D. Briefs	219
OBITUARY	220

Of Interest to Dalhousians Old and New

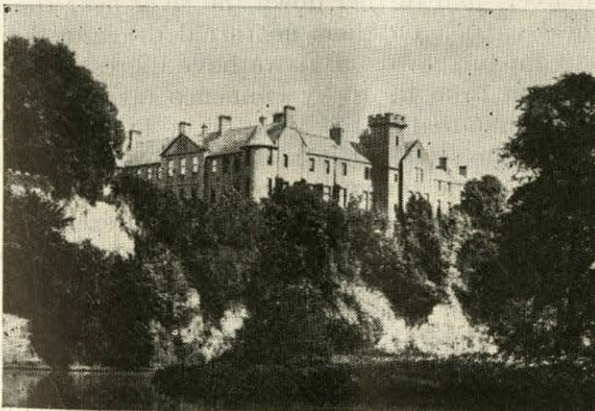
JOHN R. MACLEOD

Halifax, N. S.

THE Dalhousie family was founded by Sir John Ramsay who rescued King James VI in the Gowrie outrage. The king had been decoyed by Ruthven, the younger of the two sons of the Earl of Gowrie, who had been executed when James VI was but a boy. On arriving at his elder brother's mansion in Perth the King was led from one apartment to another until he finally reached a little turret where there stood an armed man ready for some violent enterprise. Some of the King's retinue, who had followed him, heard shouts coming from the turret window and proceeded to make forcible entrance, and it was a page of the King's, called Sir John Ramsay, who discovered a back stair which led him to the turret where he stabbed Ruthven twice and thrust him down a staircase where two of the royal attendants dispatched him with their swords. The grateful King made Sir John Lord Ramsay of Barns and



DALHOUSIE CASTLE

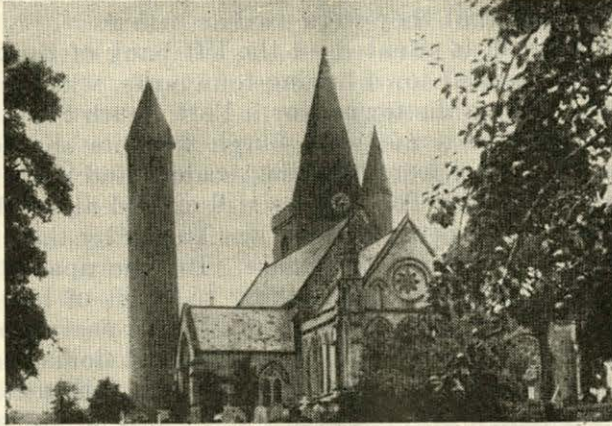


BRECHIN CASTLE

Viscount Haddington but later his son had the title changed to Baron Ramsay of Dalhousie. His son was created Earl of Dalhousie. The ninth Earl was a distinguished Waterloo officer serving under the Duke of Wellington and later held high command in Canada and also was Commander in Chief in British India previous to 1832. It was during his term of office in Canada that he made possible the founding of Dalhousie College, which our own eminent archivist, D. C. Harvey, has so ably described in his "Introduction to the History of Dalhousie University." The ancestral seat of all those following Sir John Ramsay was Dalhousie Castle, situated about fifteen miles from Edinburgh on the River Esk not far from Newbattle Abbey, the seat of the Marquis of Midlothian. On the death in 1860 of the tenth Earl, whose Governor Generalship in India has been largely underestimated, the title and the estate were inherited by the Earl of Panmure who is now the representative of both the ancient families of Ramsay and Maule. This eleventh Earl of Dalhousie was the eldest son of William Ramsay Maule 1st Baron Panmure (1771-1852) and a grandson of the eighth Earl of Dalhousie. He was born in 1801 and christened Fox Maule Ramsay as a compliment to the Whig of that period. The ancestral seat in Midlothian was now removed to Brechin Castle in Angus, the home of the Maule family and it is there to-day that the Earls of Dalhousie hold their sway.

The Castle stands on a precipitous rock rising about a hundred feet above the River South Esk, which at this point forms a deep pool called the "Eeda-weel," dreaded by young Brechiners as bottomless. It was considered a triumph of great importance in the writer's time when one was able to swim to the other side and rest on its scant rocky ledge, to recover for the return crossing. This forbidden swimming pool was within the Castle property and sometimes the "gamie" would scatter the dookers by making his appearance at the most inopportune time; scores of nude figures could be seen scrambling across the "goyle" with their scanty attire grasped tightly, making a hasty escape to reach the safety of the town side. But woe betide the swimmers who were marooned on the opposite shore; they had to wait until the uncomplimentary taunts and jeers of the indignant bathers had finally prevailed and the lordly retainer vanished as quickly as he came, into the woods beyond the river. The South Esk like other Scottish rivers was famed for the beauty and excellence of its fresh water pearls and near this same spot the pearl poachers "aye did weel" and further down the river near the Brig O'Brechin the salmon poachers carried on their nocturnal dragging when the salmon were running upstream to spawn. But we have digressed here so let us get back to the Castle and from its rocky eminence take in the beautiful view upstream; not many hundred yards away is a highly ornamental bridge with well sculptured figures resting in niches formed in the supporting piers and appropriately named the Image Bridge. This crossing of the South Esk afforded an entrance to the Castle from the south, an excellently wooded area of noble trees and rich haugh lands beyond which rise the wooded heights of Burghill. The main entrance to the Castle is on the street of that name near the West Port and typical of many other Castles, it has a large gate and gate house, built in the high stone dyke which bounds the castle grounds which can only be entered when the gatekeeper is satisfied that you have the proper credentials. The Castle underwent a siege in 1303 by the English Army under Edward I and only surrendered when Sir Thomas Maule, its brave governor, was killed. The castle library contains many valuable manuscripts, among

these are the Chartularies of St. Andrews, Brechin, etc., also the correspondence of Burns, the Scottish Bard, and his friend, George Thompson. Among its paintings is an original portrait of the Marquis of Montrose by Honhurst, estimated to be of great value. Interesting to the antiquarian and historian also, is the Cathedral and Round Tower which are situated close to the castle in a ravine of great beauty. In ancient days it contained an abbey of the Culdees and a bishopric was subsequently established within it by David I in 1150. The Cathedral Church, (dedicated to the Holy Trinity), founded



CATHEDRAL, BRECHIN

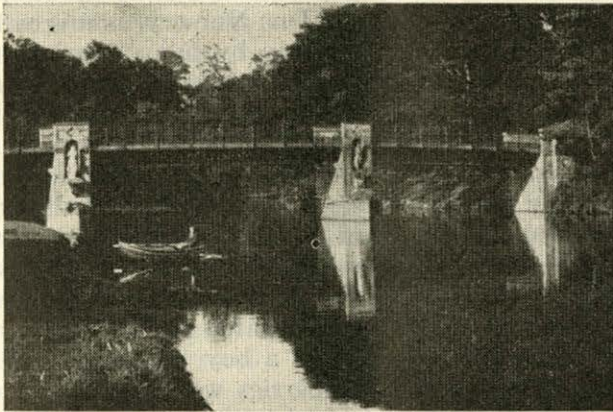


IMAGE BRIDGE

here and liberally endowed by the same monarch, was a stately Gothic fabric with aisles, etc., but these were destroyed in repairing it in 1807 when wretched taste prevailed. Adjoining the Church is a Round Tower one of the only two in Scotland, the other one being at Abernethy. It is a circular column of great beauty and elegance, about eighty-seven feet high with an octagonal spire or roof of about fifteen feet more, making in all about one hundred and two feet in height. It gradually tapers from an external diameter of fifteen feet at the base or sill of door to twelve feet at the top of windows. The door is six

and one-half feet from the ground. The top lintel contains a representation on the sides of the door are effigies of two monks with a grotesque animal in crouching posture on each side of the door sill. It contains no stair and the only access to the top is by ladders placed on wooden floors, which rest on circular stone projections within the tower. The walls are four feet thick at the bottom diminishing to less than three feet at the top. Great uncertainty at one time prevailed regarding the purpose and the period of the Round Tower but this has been largely removed by careful research, and the two similar buildings in Scotland may now be historically placed in the era after the introduction of Christianity and, whatever other purposes they were intended to serve, there can be little doubt that they were used as belfries.

The Town of Brechin is situated on the left bank of the South Esk and in ancient days was a walled town having four ports, which still remain the names of the four exits from the town; North Port, South Port, East and West Ports. When Brechin was a medieval burgh with its characteristic ports, petty customs were collected from incoming traders, and when the writer was residing in Brechin one of the Toll Houses still existed at the West Port. In fact one of the school teachers of that day was known by the nickname Tollie on account of residing in the old toll house. Brechin apart from its monuments in stone of ancient times has nothing to boast of but its immediate environs are steeped in early Scottish history. Let us pass through the North Port which heads directly for Glenesk the Highland domain of the Earl of Dalhousie. First of importance as we pass through this ancient portal is a natural ravine to our right which has been transformed into a veritable beauty spot, the slopes of which are artistically clothed with ornamental shrubs and trees of various geographical origins. The none too spacious bottom contains several hot houses which have been ably attended to by the tireless efforts of a few generations of gardeners, making the Den Nursery, as it is called, of county wide reputation. One old gardener, Sandy by name, used to admonish his weeders (as the writer well remembers) with a very pert statement in braid Scots: "Pu ilka perlikkit o'it lads" and his eagle eye could spot a weed as a hawk his quarry from on high. Then, as if in vivid contrast, to our left is the Gallows' Hill, whose name furnishes the description which we need not necessarily rehearse here, and nearby stands the North Port distillery, brewing the "barley bree." Continuing northward on the Trinity Road we reach Trinity Muir, the scene of an annual fair comparable to that in Hardy's Novel *The Mayor of Casterbridge*, and thence to the River Cruick where an excellent view of the Grampian Mountains with the celebrated forts of the two Caterthuns is seen about three miles to the left. As a boy the writer has visited those Caterthuns many times when the blueberries were ripe; the slopes of those hills were covered with heather and blueberries and young Brechiners made this pilgrimage frequently during the berry season. On the top of Caterthun is a large ring of stones several feet high, elliptical in shape, and all evidently carried from the River Cruick a few miles away. I had often wondered how they managed to get those big stones up there and was assured by my great aunt that the Highlanders passed them from hand to hand up the steep slopes to the top of Caterthun; the explanation sufficed but I still did not understand how the huge stone which stood near the middle of the ring got there and my truthful aged companion told me in a hushed whisper that the Devil himself brought that one up.

Now casting our glance to the right we see the Kirk of Stracathro, the scene of King John Baliol's submission to Edward I in 1296. In 1130 a battle was fought in the same neighborhood between David I and Angus Earl of Murray which ended in the defeat of the latter. The word Stracathro, so I was told in my youth by the same informer, was supposed to be a contraction of the battle cry of the Scots when facing Edward I, "strike and ca through." In broad Scots which the *uneducated Scotch* use "ca" means drive, hence Stracathro. This has been contradicted by later historians, who give it a Roman derivation meaning the Street of the Camps, which might signify that the Romans had their camps there when they penetrated far up the east coast of Scotland into Aberdeenshire. At Stracathro near the junction of the West Water and the North Esk stands the mansion house of Stracathro, and a little to the Northeast can be seen the turreted castle of Inglismaldie rising from the adjoining woods. One of our veteran students now attending Dalhousie University in one of the professional courses has during his leaves in Scotland visited Stracathro several times. A large hospital there was used by the military and he was profuse in his appreciation of the hospitality afforded him during his stay at Stracathro. Only last fall when in conversation with him, he made this remark to the writer: "If I was there now I would be out stag hunting with the Laird." Leaving the Cruick and traversing another two miles we reach the beautiful village of Edzell with its modern High Street, entrance to which is through a massive stone arch. Here to the westward about a mile from Edzell stand the extensive ruins of Edzell Castle, the ancestral seat of the once powerful Lindsay family, and a descendant of which, Dr. A. W. H. Lindsay was professor of Anatomy and secretary of the Medical Faculty of Dalhousie from 1885-1915. Many hair-raising stories has the writer heard from his guardian of the doings of the fierce Lindsays, one of which lingers freshly in memory to this late day. The burial ground not very far from the castle has a small chapel in the centre of it, in which I was told the Lindsays kept their departed prior to interring them in the family vault. The chapel, so I was led to believe, had a tunnel which connected it to the Castle nearby. It seems that one of the ladies who had taken her demise, had been placed in the Chapel pending her final interment in the family vault. She had been prepared for burial with her rings and other jewellery on her person and it was told to me by my informant that a robber had broken into the Chapel and while taking the rings from her fingers she suddenly revived and lived many years thereafter. The gallows used by the Lindsays was a huge tree with a stout limb growing at right angles to the parent trunk at a convenient height from the ground, and was located some distance from the castle in a wooded section near the village of Edzell. I was told that many of the Lindsay enemies had been hanged thereon and I felt very much relieved to know that the Lindsays had long since departed from Edzell Castle and the ruins and its immediate environs were now the property of the Earl of Dalhousie. The garden walls of this old castle are ornamented by a number of elaborate carvings in stone. On the east wall are the celestial dieties; on the south are the Sciences and on the west the theological and cardinal virtues, forming one of the most interesting memorials of its kind in Scotland. I still remember my visit there over fifty years ago; an old worthy with a crooked staff which he used as a pointer in describing the carvings, escorted us on our tour of the garden. I have only one recollection of all his descriptions and it was

when he pointed to a small sculptured figure carrying a satchel and addressed me thus: "He is a wee lad like yersel gaen tae schule." A large visitor's book was kept in a small room, evidently the summer house built in one of the corner intersections of the garden wall, having a table and seats. Many celebrities had signed its pages and in due course I followed the example of my adult companions and scrawled my name in bold upright handwriting across its heavy page.

The donjon was there with its awful blackness and depth. I dropped a stone into it and waited for the resounding thud of its arrival at the bottom. It seemed to take ages. There also was a huge fireplace in the castle kitchen on which an ox could be conveniently roasted at one time.

But let us get back to Brechin which is only a few miles away, miles packed full of entrancing remnants of early Scottish history. An afternoon can compass all we have seen to this moment and still leave ample time to visit the Suspension and Gannochy Bridges which span the North Esk, as well as to go up Glenesk where the Earls of Dalhousie still hunt the deer and woodcock in the wilds of the Grampians. The shooting lodge of the Ramsays is at Invermark Lodge near to the picturesque ruins of Invermark Castle. Whilst speaking of the hunting lodge up Glenesk it might not be amiss to mention a few words about the late G. F. Pearson, L.L.B., K.C., at one time Chairman of the Board of Governors of Dalhousie University who during his term in that capacity devoted many hours working tirelessly on behalf of his Alma Mater. When John Cameron, M.D., C.M., Professor of Anatomy, was preparing to make a visit to his homeland Mr. Pearson asked him to call on the Earl of Dalhousie and request of him to send a box of heather complete with soil taken from the Dalhousie Estate. The Earl, who had been badly shaken in World War I, could not be contacted, but the Countess generously acquiesced and a box six foot square and eighteen inches deep was filled with a block of soil and heather taken from the foothills of the Grampians on the Dalhousie Estate. It was shipped by rail to Glasgow, from thence to be forwarded by ship to Halifax, but owing to the big transportation strike at that time the box lay on the quay for nearly six weeks and when it ultimately arrived at the Forrest Building it had little life left in it. Apparently the heather had not yet received sufficient mishandling, for a Dominion Botanist made a thorough examination of all the soil in the box before any transplanting could be accomplished. By constant watering a few green portions survived and some were planted in the Oval at Studley Campus and the rest at the Carleton Campus. The heather did not survive. It was the intention of Mr. Pearson to present each graduate with a sprig of Dalhousie heather when he received his degree. This failed to materialize, but there is still to-day at the Carleton Campus a square yard of Scottish earth which for many years was suitably encircled by a miniature fence and a small plaque nearby which read "Scotland Yard." To consecrate this hallowed spot the writer asked an Aberdeen lady, the wife of one of our Dalhousie's Medical Staff to dance a few steps of the Highland Fling there, where rugged Scotia's soil rests peacefully in Nova Scotia's lap.

Let us hie to the West Port as the "Bonnets O' Bonnie Dundee" has it, and again sallying out of this western gate we follow the road, with the Grampians standing like a wall far in the distance. We pass Careston, Finavon, Tannadice, Justinhaugh and crossing the South Esk we reach the county capital Forfar with nearby Kirriemuir, the home of the renowned playwright

J. M. Barrie, whose volume *A Window in Thrums* is a classic and whose address "Courage" delivered at St. Andrew's University when he was made Chancellor, is still widely read. Lovers of literature make Kirriemuir a shrine which they visit as devoted pilgrims. Here also our beloved Anatomy Professor, Dr. John Cameron, first saw the light of day. His love for Dalhousie has never waned, nor has his affection of his birthplace, which is exemplified in his choice of a name for his villa in Bournemouth, England, which he named Balmashanner, after a mountain of that name near Kirriemuir. But I could go on at length, from the East Port down to Montrose, that seaport where the Douglas sailed for the Holy Land with the heart of Robert the Bruce, and the South Port leading one south towards Glamis Castle of Macbeth fame, and more recently the home of our beloved Queen. But suffice it to say that whenever Dalhousians are on a visit of some length to the Old Country, they should make it a point to visit "Brechin Castle," the present home of the Ramsay family. A few years ago the late Dr. Archibald McMechan, beloved of old Dalhousians and known far and wide for his contributions to Canadian literature, had the pleasure of visiting Dalhousie Castle in Midlothian, but regretted that he had not travelled as far north as Brechin. On his return he said that at the time of his visit to Scotland, Dalhousie Castle was being used as a boy's school; still, as it were, fulfilling the aspirations of the former Earl of Dalhousie when he founded Dalhousie College here in Nova Scotia for the purpose of a greater diffusion of knowledge and understanding through the medium of higher education.

Perhaps as a fitting conclusion this extract from the December 11th issue of the *Brechin Advertiser* entitled "Our Friends Abroad: Dalhoosie or Dalhowsie" might not be considered amiss: "Dalhousie University, Halifax, is looking forward to a fresh period of development and prosperity under the new President Dr. Alexander Enoch Kerr. Dr. Kerr, himself an old Dalhousian, was inducted last month and all kinds of tributes to his gifts of character and leadership were paid on that occasion. One incident, to which the *Halifax Mail* gave some prominence the following morning, happened at the inauguration dinner and suggests that among the gifts of the new President is that of "thoroughness." The question was raised at the dinner should the "ou" in Dalhousie be pronounced "oo" or "ow". The President had the answer. Recently he said his "ow" pronunciation had been questioned on several occasions; latter by no less a person than Mr. Justice Kellock. During lunch in Toronto with the distinguished Justice, Dr. Kerr said Mr. Kellock asked him why some people persisted in the "ow" sound. Upon his return to Halifax President Kerr said he scoured the files of the *Dalhousie Gazette* and discovered an article by Dr. Schurman, Professor of English at Dalhousie in the '80's. Dr. Schurman, he said, had written the Earl of Dalhousie who had replied that probably the uneducated Scot would say "Dalhoosie" but that every educated Scot said "Dalhousie." The Dalhousie title was taken from the lands of "Dalwalsey," which may account for the "Dalhoosie" pronunciation which is often heard in Midlothian, the Dalhousie "calf ground" and apparently it still lingers in Canada.

Pneumococcal Meningitis

Case Reports

By

C. B. GREENE, M.D., C.M., Med. Dept.

Victoria General Hospital

PRIOR to the advent of chemotherapy, this variety of acute bacterial meningitis was almost 100% fatal. There is no doubt that, since the introduction of the sulphonamides and penicillin, we have in our possession a powerful weapon against this infection. Recent literature has reported many gratifying results from therapy with these drugs in cases where treatment was initiated early, and, especially in those instances where the primary source of infection was discovered at the onset. In other cases, however, in which diagnosis has been late and the patient has reached a moribund comatose state, this type of therapy has shown little effect.

In a small series of four cases recently treated at the Victoria General Hospital, the above observations have been borne out, and for this reason, and the interesting clinical features, these cases are being reported. Three patients died within 24 hours of admission and one recovered within seven weeks.

Case No. 1. Mrs. R. S., age 50, admitted to hospital in a state of coma. Five days prior to admission, she had had a slight cold with a productive cough. Twenty-four hours prior to admission she developed left-sided earache with a bloody discharge. These symptoms were followed by nausea and vomiting, drowsiness and stupor of rapid onset. Her past history revealed that she had an untreated hypothyroidism and a chronic otitis media. On admission, temperature was 102.8° per rectum, pulse—95, Resp.—20, B.P.—158/78. The skin was markedly dry with edema of face and lower extremities, presenting a picture of hypothyroidism. Pupils were equal and active with a tendency for the eyes to roll upwards. There was a sero-sanguinous discharge from both ears in keeping with a bilateral acute otitis media. It is interesting to note that on first examination there were no signs of meningitis, that is, no neck rigidity or Kernig's sign. The deep reflexes were absent. However, signs developed five hours after admission. Auscultation and examination of chest were suggestive of a mild congestion, with the presence of auricular fibrillation.

At this stage, a lumbar puncture was performed and a purulent, cloudy fluid obtained under 570 M.M./H₂O pressure. Direct smears were made and organisms, characteristic of pneumococci, found. Penicillin in 25,000 unit doses every three hours and Soludagenan, 1 gm. every four hours, intramuscularly, accompanied by penicillin, 20,000 units in saline intrathecally twice daily were administered. After three days treatment was reduced to one dose intrathecally daily for fourteen days and Soludagenan discontinued. Initial lumbar puncture was followed by a paracentesis of both ear drums. Cultures revealed growth of pneumococci from left ear only. Under this treatment, temperature dropped to normal within 36 hours and patient regained consciousness. The spinal fluid became sterile on the fourth

day. On the fifth day, temperature began to rise, accompanied by a rise in cerebral spinal fluid pressure. Examination by X-ray of mastoids showed a bilateral cloudiness. On the tenth day, a simple left-sided mastoidectomy was performed and cultures made at different stages of the operation. In view of the fact that the cultures from the left ear were positive, only a unilateral operation was performed. Following this procedure, temperature fell rapidly to normal with improvement of patient's general condition. Cultures of mastoid cells were negative for pneumococci. On the fourteenth day, intrathecal penicillin was discontinued, but carried on intramuscularly for one week longer for a total of 4,125,000 units plus 375,000 intrathecally. One week after intrathecal penicillin was discontinued, spinal fluid returned to normal levels. From the end of the third week onward, patient's recovery was uninterrupted and at the end of the seventh week she was discharged. Myxoedema present at admission responded well to thyroid extract. In the ensuing four months, recovery has been shown to be complete.

Case II. Mrs. J. S., aged 44, admitted to hospital on March 7 in a state of coma. Illness began on the 4th of March with a sharp stabbing pain in the left lower chest following a heavy chest cold. This spread rapidly to the right chest with accompanying dyspnoea, prostration, nausea and vomiting. Thirty-six hours prior to admission, she developed severe headache, pain and stiffness in her neck, followed by coma. At time of admission, she had been unconscious for 24 hours, temperature of 104° F. per rectum, pulse—130, respiration—35, B.P.—150/100. Skin was cold and clammy with generalized purpuric haemorrhages. Pupils were fixed and unequal. Nasopharynx and aural canals revealed no evidence of infection. Kernig's sign, neck rigidity and deep reflexes were absent. Examination of chest revealed diffuse loud rattling bronchial breathing obliterating heart sounds with patchy areas of dulness over both lung fields.

Immediate treatment consisted of 50,000 units of penicillin I.M. in conjunction with symptomatic treatment. Lumbar puncture was postponed in view of the patient's critical condition which deteriorated rapidly with ensuing death four hours later. Blood count revealed a 11,800 polymorph. leucocytosis, urinalysis showed albumen; numerous pus cells; 4-5 granular casts per h.p. field. In the absence of neck rigidity and Kernig's sign, a diagnosis of meningitis was somewhat in doubt until autopsy was performed when an acute fulminating haemorrhagic pneumococcal meningitis, with an acute bronchopneumonia was found.

Case III. Mr. J. P., aged 48, admitted to hospital March 19, 1946, in a semi-comatose, cyanosed restless state. Four days prior to admission, patient was seized with fever and chills, elevation of temperature, following a two weeks' illness with influenza. On the 17th of March, he was seen by referring physician who found a definite pneumonia present and administered Sulphadiazine, to which patient did not respond. At admission, patient had been in a comatose state for six hours, temperature 104: F. per rectum, Pulse—90, Respiration—50. Skin was moist and cold with faint, generalized, purpuric spots. Pupils were fixed and constricted. Nose and nasopharynx were filled with sticky mucous. Auricular canal and drums normal. Chest examination revealed coarse rales, bronchial breathing, obliterating heart sounds, no dulness. Neurological examination revealed neck rigidity, positive Kernig's, hyperactive reflexes with presence of ankle clonus. Immediate lumbar

puncture and leucocyte count were performed, the latter showing a polymorph leucocytosis of 24,400. The cerebral spinal fluid was bloody and purulent under 230 M.M./H₂O pressure. Direct smears showed presence of pneumococci, grown later in pure culture. An initial dose of penicillin, 50,000 units intramuscularly, 10,000 units by intravenous, continuous drip with 10% glucose and 25,000 units intrathecally were administered, followed by 25,000 units intramuscularly every three hours.

Under this treatment, patient showed little response and death followed less than 24 hours after admission. No organism could be isolated from blood cultures. When autopsy was performed, an acute suppurative septo meningitis (pneumococcal) and internal hydrocephalus were demonstrated.

Case IV. Mr. R. L., age 42, admitted to hospital April 1, 1946, in coma. Two days prior to admission, he became nauseated and vomited, accompanied by dizziness and photophobia. These symptoms were followed by rapid onset of neck rigidity, severe headache, stupor and coma. Two months prior to the onset of this illness, patient had sustained a severe compound comminuted fracture of the frontal area of skull with resultant optic atrophy of right eye. He was discharged on March 15, 1946.

On admission, temperature 101 : F./P.R., Pulse 145, Resp. 42, B.P. 130/80. A deep oblique well healed scar extended across forehead. Pupils unequal and fixed. Skin was cold and moist with generalized purpuric spots. Respirations were short and grunting. Auscultation revealed harsh bronchial breath sounds, diminished at both bases with slight dulness. Pulse was rapid, regular, small in volume, heart sounds being obscured by breathing. Neck was rigid, Kernig's sign positive with a loss of all deep reflexes.

Lumbar puncture was performed, the cerebral spinal fluid showing a pressure of 500 M.M./H₂O of a yellowish turbid color. Direct smears showed the presence of pneumococci.

An initial dose of penicillin, 50,000 units, was given intrathecally, followed by penicillin, 20,000 units, and Soludiazine by intravenous continuous drip in 10% glucose. No response was shown to this therapy, patient expiring three and one-half hours later. At autopsy, an acute suppurative pneumococcal meningitis was found from an extension of infection from naso-pharynx through a fractured cribiform plate.

Discussion

Authorities have stressed several factors in the successful treatment of pneumococcal meningitis. Of these, the two most frequently mentioned are: (a) the early diagnosis and institution of treatment and (b) the recognition of the fact that meningitis is usually secondary to some primary focus which, if completely eradicated, greatly enhances the prognosis. The first case presented a picture of hypothyroidism and otitis media. A meningitis was suspected, however, and an immediate lumbar puncture performed with isolation of pneumococci, the physical signs not developing until five hours later. The presence of this organism associated with an otitis media left no suspicion as to the source, this being confirmed later by pure culture from aural discharge. When it was evident that paracentesis of ear drums was not sufficient and that the mastoids were involved, eradication of this foci by surgical procedure was performed, followed by a complete recovery.

In the three cases in which intensive therapy was ineffective, the abrupt, fulminating onset was common to all, the patients succumbing before adequate

therapy could be administered. The overwhelming toxemia was evident by the purpuric haemorrhages and the extremely moribund state of the patients. This fact was borne out at autopsy where marked softening of internal organs had occurred. As already mentioned, the prognosis in this type of case is very poor, especially in patients over 40 years of age, where the inherent severity of the infection may mask the diagnosis, as in the case of Mrs. R. S. who, on admission, had no rigidity or signs of meningitis. At autopsy, however, an acute fulminating meningitis was found with a primary pulmonary focus.

In the case of Mr. J. P., the presence of an internal hydrocephalus was significant in that a subarachnoid block must have occurred. This, no doubt, was one of the factors militating against the effectiveness of treatment.

This complication has been reported by other observers and by some it is claimed that it does not necessarily carry a bad prognosis, provided it is recognized and intraventricular treatment begun. This procedure, however, carries a risk in itself, unless in experienced hands. The primary source of infection in this instance was not so clear, as no definite foci could be established beyond a mild congestion of the lungs at autopsy. The fact that the patient had physical signs of consolidation and had received sulpha drugs three days prior to admission would suggest a pulmonary source.

The last case, that of Mr. R. L., is interesting in that it followed severe trauma and fracture involving frontal area of skull and cribiform plate, offering direct pathway for the spread of infection from the nasopharynx. The presence of necrotic bone and brain tissue served as a perfect media for the rapid growth and spread of the infection.

Summary

1. A small series of four cases of pneumococcal meningitis has been reported. One was successfully treated with sulphonamide and penicillin plus appropriate surgical treatment to primary foci and three in which therapy had little influence upon the course of the disease came to a fatal termination.
2. In the three latter cases, it would seem the severe toxemia manifested by the rapid down hill course rendered our present therapy inadequate.

The Work of the Air Evacuation Section Overseas

E. PAUL NONAMKER, M.D.

IN the month of October, 1943, I was surprised to find myself posted to Bowman Field, Louisville, Kentucky, to observe the work and training of the United States Army Air Force Air Evacuation Squadrons. At this time, the U.S.A.A.F. was well organized in this work and had numerous squadrons in all theatres of war. My stay at Bowman Field lasted two months, during which time, I made flights to Randolph Field Texas, Alabama, and Kansas, as well as numerous shorter runs.

One other R.C.A.F. Medical Officer, F/L D. Lloyd-Smith of Montreal, accompanied me on this course, the idea being that we would return to Canada and train a number of units for this work overseas. One such unit was trained at Rockcliffe, Ontario, and sent overseas early in 1944. In August, 1944, this unit landed in Normandy and started evacuating Canadian casualties by air to the United Kingdom.

At first, the only reception unit in the United Kingdom was at Swindon, where British casualties were landed necessitating a hundred mile trip by ambulance for the Canadian wounded. This not being good enough, two more units were established, one at Redhill and one at Farmborough, England, for the reception of Canadian wounded from which fields the nearest Canadian General Hospital was only four miles.

I had charge of the unit at Redhill which consisted of 80 personnel—15 ambulances and a set up for resuscitation of patients if necessary. Later, I joined the only Canadian Air Evacuation Section on the Continent. These units were completely independent and self maintaining in every way and were situated fairly well forward in the vicinity of a Casualty Clearing Station.

The planes used for this work were Dakotas of the Royal Air Force No. 46 Group Transport Command. These planes could carry either 18 or 24 stretcher cases, depending on the type of supports they were equipped with. The planes brought in such freight as ammunition and gasoline and returned to the United Kingdom with casualties. Each one carried a nursing orderly who was trained to administer oxygen and give hypodermics—a rather far step from the American planes which had a graduate nurse and well trained technician.

Practically all types of wounded were evacuated by air with the exception of severe chest injuries and abdominal cases which had been operated on within two days—even this was not always observed as I recall one Colostomy case which arrived in England before coming out of the anaesthetic. It was not uncommon to have cases in a base hospital in England within twelve hours from the time they had been wounded at the fighting front, which fact was a great morale booster for our troops. Anoxea was not a problem as these planes always flew at low altitude unless weather conditions made this impossible. In such instances, cases which might not stand the higher altitudes well were held at the Unit or returned to the Casualty Clearing Station.

The biggest day's work we had was at Dipholtz, Germany, when the British Second Army was advancing on Bremen and five hundred and seventy-five casualties were evacuated by our unit to the United Kingdom. The last plane to leave the field that night carried 40 casualties, 26 of which were stretcher cases. On this particular field we had some interference from a pocket of Germans who were holding forth in a field directly across the air-drome—however, their zeal was somewhat dampened by our Spitfire Squadron which made several strafing attacks on them daily.

At the termination of the European War, we were at Luneburg, Germany, and continued to evacuate British casualties to the United Kingdom until July. At the time of the German capitulation, I made several trips to different parts of Denmark to pick up some of our injured airmen who had been shot down late in the war and held as prisoners. On most of these trips, we used a captured German Ju. 52. As we were the first Allied troops in some of these Danish towns, the welcome we received was always very hospitable to put it mildly.

In July, 1945, the work of the only Canadian Casualty Air Evacuation Section on the Continent ceased and we returned to England after having evacuated a total of thirty-two thousand casualties without the loss of a single life.

FOR SALE

**An Examining Table for Doctor's office, adjustable,
and in good condition. For further particulars apply
to Mrs. William Rockwell, River Hebert, N. S.**

* "Postnasal Drip"

Original Paper by

ARTHUR W. PROETZ, M.D.

St. Louis, Missouri

THE term "postnasal drip" leaves nothing to the imagination. The symptom, on the contrary, leaves everything, which constitutes its chief menace. Where the term arose is unknown. Overnight the laity taught it to the doctors in hushed and often despondent tones. One hears it a dozen times a day, stigmatized usually with one of those clichés reserved for incurable diseases. Only the term is new. The symptom is ancient. Our grandfathers called it "catarrh." Because patients of all walks of life and levels of intelligence have lately elevated a disagreeable symptom to a serious affliction and come in numbers for relief, one is prompted to consider the nature of these postnasal discharges and to rationalize their causes and effects.

Actually only one type of discharge is capable of endangering health and that is one carrying virulent organisms. Among the many cases examined this type is relatively infrequent. It should be pointed out that it is the function of nasal mucus to carry off pathogenic organisms and that in these cases the postnasal "drip" complained of is evidence of protective activity, cessation of which would augment the seriousness of the nasal infection.

Patients become conscious of discharge in the nasopharynx when the mucus which is normally there is excessive, abnormally viscous, abnormally fluid, irritating (mechanically or chemically or biochemically), odorous, or obstructive.

Among the agents capable of bringing about these abnormal states are: central heating, tobacco smoking, alcohol, thermal changes, local mechanical abnormalities, non-malignant lesions, dusts, fumes, bacteria and viruses, fungi, allergens—inhaled or ingested, atrophy, or excessive and prolonged medication.

Let us see what evidence there is to support the notion that swallowing nasal secretion is harmful. Nasal mucus is composed of mucin 2.5 to 3 per cent, salts 1 to 2 per cent and water 95 to 97 per cent. It is more viscous than gastric mucus; nasal secretion containing 1.26 per cent protein has a viscosity comparable to an 8.4 per cent secretion of gastric mucin. Cases of acute rhinitis up to three days old vary in reaction from neutral to alkaline, but show no culturable content. After this the reaction is alkaline and cultures can be obtained but on recovery the reaction returns to neutral and cultural contents disappear. In cases of chronic rhinitis without other general symptoms the reaction is usually neutral and the mucus more often sterile than not. In cases of chronic rhinitis associated with sinusitis and polyp formation the reaction may be either neutral or alkaline and there is a culturable content in about half the cases, and on a medium with a reaction usually responding to that of mucus.

Growth of nasal bacteria, then, in the average stomach contents is problematical and unlikely. The percentage of hydrochloric acid in the gastric juice is considerably above that at which many organisms can live. If the

added mucus has any effect at all, it will probably slightly buffer the hydrochloric acid. This is the studied opinion of more than one gastrologist whom I have consulted.

From this it appears that only a deranged stomach in which the pH was approximately that of the nasal secretion could be much affected by nasal secretions, and then only if the secretions contained virulent pathogenic organisms, such as are rather more characteristic of an acute upper respiratory infection than a chronic "postnasal drip."

Let us examine likewise the possible effect of postnasal drainage on the lower respiratory tract. Here nasal mucus can remain in the trachea, bronchi and lung only in cases in which the ciliary mechanism is incapacitated. These cases are uncommon. They are confined chiefly to such inflammatory conditions as acute tracheobronchitis or such mechanical ones as bronchiectasis—which brings us face to face with another expressive but vulgar and frequently misleading term "sinus lung."

Presumably this term implies that an infected sinus infects a lung and keeps it infected. No one will deny that an acute upper respiratory infection can and does travel to and infect the lung. But it does not follow that, once the acute stage has merged into a chronic one, the nasal discharge—now fairly innocuous—is responsible for the failure of the chronic bronchitis to clear up. By this time the bronchial tree is infected on its own. Eradicating the nasal discharge alone will not clear up the lung. Our neighbour's dandelions may invade our lawn, but exterminating his will not get rid of ours. Though attempts to cure the bronchitis will be greatly hampered by neglecting the infection above, this applies to any infection—tonsils, adenoids, teeth—and the role played by the lymphatics cannot be overlooked.

Between the upper and the lower respiratory tracts, the larynx bears the brunt of both their discharges, especially at night when unconsciousness permits the accumulation of secretion, and uninterrupted breathing dries it and makes it sticky.

To return to the clinical problem and the causes of "postnasal drip:"

Central Heating.—Low relative humidity in heated rooms results in abnormal evaporation of water from the nasal mucus. Its viscosity increases and the embarrassed ciliary apparatus permits it to accumulate. This "drip" is a mechanical nuisance, but harmless.

Tobacco Smoking.—The products of combustion from burning tobacco irritate the mucosa, which defends itself by throwing off excessive quantities of mucus. After long indulgence hyperemia gives way to more permanent vascular changes, and the character of nasal mucus is altered. In some cases the amount is reduced. The subject becomes conscious of his nasal secretion, which in this case is a reaction to irritation and not in itself injurious.

Alcohol.—The ingestion of alcohol is followed by dilatation of the peripheral blood vessels. Owing to their anatomical arrangement the nasal vessels are especially reactive. In many subjects, notably in allergic individuals, the reaction is sufficient to shut off the nasal airways. Sinus ostia are closed. Mucus accumulates in the sinuses, which appears in ropes or globules when they re-open. Usually this occurs on the following morning when the patient no longer attributes it to his drinking. This discharge, like the last, is only the end result of self-imposed conditions and is, in itself, harmless.

Thermal Changes.—In fall and winter (and since the advent of air-conditioning in summer as well) one is exposed to abrupt and often extreme changes in temperature which may occur several times a day. These produce vascular responses in the mucosa of the nose and pharynx which in turn are accompanied by changes in the amount and character of the secretion.

Local Mechanical Abnormalities and Non-malignant Lesions.—These produce changes in the nasal secretions by setting up abnormal air jets and eddies, thus diverting the normal air stream and concentrating it upon restricted areas. The drying effect is the same as under Central Heating, except that it is localized instead of general.

Dusts and Fumes.—The dusts of the home and the highway as well as the industrial dusts of mines, quarries and factories which are filtered from the air by the nose are naturally deposited upon the blanket of mucus which coats it. So long as these are chemically inert very little change is produced in the mucus carrying them off. When they are irritating, they cause an increase in the secretion at first, which after a time subsides owing to venous stasis, but the mucus becomes more viscous and either sticky or ropy depending upon the amount secreted.

Fumes act in much the same way. Many persons, unaccustomed to the factory environment into which they were projected by the war have reported increased postnasal drainage and pharyngeal discomfort. The secretion is part of nature's attempt to rid the respiratory tract of irritants. In this case the mucus, carrying irritants, may be a menace to health when swallowed.

Bacteria, Viruses and Fungi.—The secretions bearing these living organisms may be a danger, as has been stated, by causing, spreading or maintaining infection in the respiratory tract, the digestive tract or almost anywhere else that infection can reach. In order to do damage the organisms must be viable, pathogenic and at least moderately virulent. This and the above constitute practically the only types of postnasal "drip" injurious to health.

Allergens—Inhaled or Ingested.—Under this heading fall the copious watery secretions of hay fever, which are rarely complained of as postnasal, and also the heavier types which, especially when they issue from the sinuses, are apt to be ropy.

Atrophy.—Whether it be the specific atrophic rhinitis or the mucosal atrophy which is the terminal stage of a long-standing fibrosis, the airways of the nose are increased and many of the glands are destroyed. To the altered secretions are added desquamated epithelium and, especially in the first mentioned type, other products of degeneration. In this case the disagreeable postnasal discharge is accompanied by crusting and frequently ozena.

Metabolic and Eliminative Disturbances.—These are common causes of altered and augmented nasal secretion, sometimes directly, sometimes as a result of circulatory congestion. Diabetes and nephritis, colitis of various types and constipation fall in this category.

Emotional Disturbances.—Emotional disturbances, fear and protracted anxiety, have been observed on several occasions during the recent war to have produced dry pharynges and altered secretions. These are apparently related to the laryngeal neuroses, dysphagia and aphonia. They usually disappear abruptly with an improvement in the causative circumstances.

Excessive and Prolonged Medication.—Perhaps this category should not be left for the last since it is one of the commonest. The regrettable practice of continuing indefinitely the doctor's prescription—intended for a passing ailment—keeps many a nose in trouble. Sometimes it is the drug itself. The constrictors come first because they open the nose; cocaine heads the list. The very opening which the patient seeks causes over-ventilation and drying. The secondary reaction of vaso-dilatation characteristic of most constrictors causes passive congestion and altered secretion. Sometimes it is a preservative in the mixture which causes irritation and inflammation; among these phenol, menthol, eucalyptol and above all chlorobutenol are the offenders. This type of "drip" is self-imposed.

Hostile Dependent Behavior in Rehabilitation*

—Of Veterans with Psychoneuroses and of the Industrially Injured
with a Psychologically Protracted Convalescence—

ALFRED P. SOLOMON, M.D.

Clinical Director, Veterans Rehabilitation Centre,
State of Illinois, Chicago

IN every treatment involving psychiatric understanding, the therapist must be aware of the degree in which dependent impulses, or the patient's reaction against these impulses, color or motivate the presenting symptomatology. In a psychiatric treatment having as its goal the rehabilitation of the industrially injured with a psychologically protracted convalescence or veterans suffering from psychoneurosis, the problem of dependence has special importance. Not only does the psychiatrist have to give his patient the painful recognition that his behaviour is the result of his own dependent impulses, but also, through this recognition, that he must give up the economic support provided by the employer or government which makes it possible for the dependence to continue. This paper describes the psychologic nature of hostile dependent behavior in the psychologically protracted convalescent, and in the veteran with a psychoneurosis, and the manner in which it interferes with rehabilitation both as to the patient, and society's attitude toward him.

At the state-operated Veterans' Rehabilitation Centre in Chicago, a program for the rehabilitation of psychoneurotic veterans and veterans suffering from an ambulatory psychosis has been developed that has as its basis the understanding of human relationships of which psychologic dependence is one. In this paper suggestions will be made for the formulation of a program of treatment and rehabilitation of the industrially injured patients with psychologically protracted convalescence which incorporates the understanding and experience gained at the Center.

The existence of laws requiring the payment of compensation benefits during the period that the patient is regarded as unable to return to work adds a factor to the treatment of the psychologically protracted convalescence. On one hand, these compensation benefits tend to prolong the convalescence; and on the other hand, they produce certain attitudes on the part of those whose responsibility it is to administer these benefits which further contribute to the patient's symptomatology. The patient with clinically prominent dependent attitudes does not say to the individual upon whom he is dependent, "I am dependent; I am behaving as a child. You take care of me; you support me; you provide for my needs!" Instead he presents to the physician a behavior unique to this type of patient. His behavior is unlike that of the usual psychoneurotic patient coming to the psychiatrist for help whose dependence manifests itself in a doctor-patient relationship and whose objective is a relief from distressing symptoms. Such a patient will co-operate, will accurately report complaints, and will accept the treatment suggested. The patient with a psychologically protracted convalescence does not as a rule

come to the psychiatrist for a treatment which will lead to a return to work, even though this may be his stated purpose, and the psychiatrist be one of his own choosing. He seeks, rather, a diagnosis with a bad prognosis. He vigorously opposes one which does not show relationship between his presenting symptoms and the accident. If a diagnosis is given which suits his desire to show both a bad prognosis and a correlation between symptoms and accident, he reacts warmly to the psychiatrist or physician and cooperates to a degree. The behavior of these patients strongly resembles that of the hypochondriacal and neurasthenoid patients, where the symptoms, defensively presented, are in the nature of fantasies and of body delusions, and the problem one of a character disorder. True psychosomatic symptoms in these patients are rare, and if present, such a patient should be classified as an anxiety hysteria rather than a psychologically protracted convalescent. The presenting emotions during the psychiatric consultation, which usually comes late in the course of convalescence, are those of anger, rage, argumentativeness, suspicion, frustration, feelings of being taken advantage of, rejection, and abuse. The physician who treats these patients has to determine whether or not the symptoms presented are the result of the injury, and whether they are of such a nature as to interfere with the patient's return to work. If the physician is able to determine on a purely medical or surgical basis that the patient is able to return to work, he then has the responsibility of disregarding the rationalizations for dependence, and for terminating the benefits which give the patient economic support. The acceptance or rejection of the patient's dependent attitudes becomes an issue in the doctor-patient relationship. In some instances, insight as to the psychologic nature of the symptomatology will cause many to give up their rationalizations and return to work. In other instances, however, patients do not respond so effectively, and hostility, frustration, and anxiety are increased, with a vicious circle of development.

Generally speaking, there is very little therapeutic interest on the part of employers, claim men or industrial physicians in this behavior. For the most part they are contemptuous, abrupt, and curt in the manner in which they dismiss the rationalizations for dependence. The patient is usually made to understand that his behavior is socially undesirable. The caustic attitude exhibited toward such a patient is not confined solely to decisions as to termination of the compensable period in the convalescence. Physicians who are alert to the psychoneurotic nature of the behavior are reluctant to admit such patients into hospitals, or if they do, they attempt to terminate the hospitalization as quickly as possible. Nurses, often with unwarranted vigor, carry out orders that serve to discourage the acting-out of dependent attitudes. Industrial surgeons with long experience strongly oppose the use of palliative orthopedic belts, braces, or casts, or of exposing the patient to any medical or surgical procedure if indications are equivocal and there is any possibility of unpleasant or partially disabling sequelae. They know how often such procedures are utilized by the patient as further rationalizations for dependence. On the other hand, inexperienced surgeons, unaware of the psychologic meaning of the eagerness with which such patients pounce upon any suggestions whatsoever for the treatment or diagnosis of the symptoms which they present for consideration, proceed in giving simple or elaborate treatment, too late finding out that all they have done is to promote

a psychologically protracted convalescence with more presenting symptoms usually than the patient had when the treatment started.

The patient's occasional need for legal protection further complicates the industrial scene. His attorney, sincere in his wish to protect the patient's interest, often unwittingly furthers the development and reinforcement of the various manifestations of the hostile dependent behavior. Family, friends and labor just as unwittingly give nurture to the dependent state, each for the special investments involved.

In some states, an additional complication has been the possibility of obtaining lump sum settlements. Any psychotherapeutic approach is severely handicapped where this possibility exists. Some physicians regard the giving of the lump sum settlement as the only satisfactory means of terminating a psychologically protracted convalescence. It is not new to psychiatric experience that a patient will give up his social or symptomatic behavior when he is granted fulfillment of important wishes. Military psychiatrists are very familiar with the quiescence of severe presenting symptoms when patients became aware that they no longer had to engage in combat. Patients in disagreeable or intolerant adjustments in civilian life often cease to have symptoms when removed from emotionally difficult situations. However, this type of improvement does not indicate any basic change in the patient's personality, but indicates, merely, that the patient has exchanged his illness for an acceptable relief from his anxiety. However practical the lump sum settlement may be as a method of terminating dependent behavior, it is obvious that its continuation as a therapeutic and economic tool for the resolution of the problem involves flagrant abuse of the aims and ethics of medical practice and puts a premium on asocial or psychoneurotic behavior. It is palliative and not socially or therapeutically constructive in terms of a more permanent rehabilitation of the individual to society as an active, contributing force.

Claim men, who intuitively recognize that the patient is seeking a lump sum settlement in exchange for his willingness to give up his non-conformist behavior, tend to show quite overtly their scorn and angry deprecation of such individuals. Their very strong emotional reactions, aside from practical considerations and cultural attitudes, have as deeper causes a reaction against being taken advantage of, and often a need to deny not too well compensated dependent impulses in themselves by condemning any justification or reward for any overt manifestations of dependence.

A further complication to the therapy of such patients has been the rendering of legal decisions to the effect that a traumatic neurosis is a total and permanent disability. That such decisions could have been rendered is indicative of the lack of understanding of the true nature of a psychoneurosis and of the ineffectual type of psychiatry being practised in the industrial scene.

Psychiatry must meet the challenge presented it by the injured patient with a psychologically protracted convalescence and create a method of treatment that will not utilize a purchase price as a therapeutic tool, but create, instead, a method psychologically rather than economically oriented. Before the psychiatrist can function as a therapist, the state compensation laws must be revised on the basis of recommendations proposed by a commission composed of psychiatrists, industrial surgeons, labor leaders, and insurance men focusing on the rehabilitation of men and women as personalities rather than as hostile threats to the socio-economic status quo.

iduals who do not return to work, and whose behavior contains demands for support and recognition of the dependent state.

The classifications are as follows:

Group I—Those whose characters are of such a nature that when they have had an opportunity to experience for medical reasons a period of hospital care, attention, and emotional support, they are reluctant to give up the dependent state. They are individuals who have "tasted blood" and feel the call of the Shangri-la of the past. They may be individuals who did not receive the amount of hospital care they felt was indicated, and deprived of this, still seek gratification of the awakened dependent impulses. They usually vigorously seek dependence through one rationalization or another, refusing to recognize their complaints as rationalizations; instead, they protest very loudly their wish to return to work or give other evidence of independent wishes. They say they would act in an independent manner if it were not for the existence of symptoms. Should their rationalizations be denied or not regarded with what they believe appropriate respect, they seek more convincing means of gaining their end and become very skillful and consistent in their manifestation of dependent behavior. Continued frustration of their gratification produces hostile attitudes.

Group II—Closely allied to the behavior of those in Group I is the behavior of those who are involved in severe collateral emotional problems at the time of their injury. The neurotic solution of their problem is the development of a dependent state. This solution they cannot face, so like those in Group I, they try to find a socially acceptable rationalization.

Group III—Those in whose character development a hypersensitivity to rejection occurred early in childhood. During convalescence, so long as they feel wanted and accepted, they will exhibit cooperative and socially acceptable behavior; but if they begin to feel rejected, the threshold to this feeling being very low, they react with panic and hostility.

Group IV—Those who have the type of character development which causes them to regard their injury not as if it had been caused by an accident or the fortunes of war, but instead by their employer or their government. They are the individuals who since childhood have had fear of and anger against authoritative individuals. These may belligerently refuse to go to work. It is as if they were saying, "You have injured me. You made me weak. Now it is your responsibility to take care of me, or make good the harm you have caused me." Prominent in their symptomatology is the statement, "I am too tired to go to work. I am tired all the time. I get tired very easily." They exhibit the most intensely hostile attitudes of all the groups.

Group V—Those whose character development requires a conscious denial of passive dependent attitudes and to whom a dependent state means weakness, something unmanly. During the period of their actual disability they are noted to be hypersensitive to being taken advantage of, to not being cared for properly, to being outwitted. Their defense against these feelings increases as they get the feeling they are being pushed around. They approach with hostility and suspicion those they believe are trying to overwhelm or coerce them. They will be more bitter, more critical, more clever than the others. The continuation of the dependent attitude involves both a gratifica-

tion of passive dependent attitudes, and angry defenses against them. They are psychologically unable to accept any recognition of their passive dependent state as such. They vigorously seek recognition of their rationalizations for refusing to return to work. These individuals believe they must have the last word, must win out at all cost.

Group VI—Those whose character development has created a tendency to be a martyr, and to accept sacrifices. These individuals react to a dependent state, its vicissitudes and renunciations, with a provocative behavior which invites further suffering. A vicious circle is set up in which the defensive hostility acts as a provocative agent. This type of individual sometimes gets involved in one of the unfortunate complications related to compensation. As a plaintiff he may be awarded a total and complete disability by an arbitration board. Respondent's attorney may decide that rather than gratify wishes for a lump sum settlement, he will pay out the claim in small depriving weekly benefits. Such a patient will accept this economic sacrifice for an indefinite period of time because it offers him the psychologic gratification of being pushed around, of being made the sufferer.

For purposes of simplicity of description, psychologic reactions of these patients have been presented in groups. It is usual clinical experience that a given patient will show two or more group characteristics. Of importance is the fact that the hostility which is revealed may be the hostility of frustration, the hostility of displacement, the hostility of rejection anger, the hostility of revenge, hostile defense against being taken advantage of, or provocative hostility inviting attack. There still remains another type of hostility, that which is related to the reaction of the patient to his own feeling of not "holding his end up." In our culture man is expected to work, to shoulder the responsibilities of home and society. From childhood on he is aware that for work, for initiative, for striving towards independence, there is praise, admiration and material reward; that for dependence there is admonition, scorn, condemnation, and ridicule. A patient who does not work and who has no outward disabilities to substantiate his feeling that he cannot work, has a feeling of self-condemnation which arises from inherited and developed cultural attitudes. These individuals, because they were made particularly aware of our cultural attitudes toward work and the assumption of responsibility in childhood, are so hypersensitive to the fact that they are not working that they believe others condemn them as they condemn themselves. This phenomena, called a "projection", often presents itself as a great source of anxiety, and must be dealt with before any of the underlying problems can be treated. The tendency to project one's feeling of condemnation usually manifests itself in an intensification of the need to have rationalizations for not working accepted, in an angry denunciation of those toward whom he projects his feelings, in ideas of reference, or in hostile depressive reactions. Very rarely, when a patient who has been exhibiting conversion hysterical symptoms is induced to give up these rationalizations, he develops paranoid ideas toward those who he believes think about him as he thinks about himself. He has no need to point an accusing finger so long as he feels he has justified his dependent wishes with socially acceptable hysterical symptoms.

At the state-operated Veterans' Rehabilitation Center, we have developed a philosophy of treatment which we believe is particularly suited for the rehabilitation of those veterans with anxieties, depressions and projections

related to hostile dependent attitudes. The treatment has three divisions: (1) The creation of a tone or atmosphere at the Center and its utilization as an integral part of the total treatment; (2) a program of activity therapy prescribed by the psychiatrist to meet the patient's individual personality needs; (3) psychodynamically oriented psychotherapy given on an individual group basis.

The atmosphere or tone of the Center is that of a men's club rather than that of a hospital. Some patients reside at home while taking the all-day therapy, others reside at the Center. The average length of time the patients reside at the Center is one month. They then live at home and return for the all-day therapy. The knowledge of this fact enables newcomers to recognize that their stay at the Center is voluntary, that their liberties are not restricted. The patient soon becomes aware also that he is understood and accepted. He becomes conscious that activities are being utilized not to entertain him, or to keep him busy, but to develop in him those character traits, the lack of which, or the inadequate development of which, led to his insecurity. He senses the enthusiastic cooperation and good rapport of the veterans to the members of the staff. He senses a desire among the veterans to help one another, and to take pride in each other's success. Shortly after his admission, he perceives that he is part of a group wherein a tradition has already been established, and that an understanding of human relationships is regarded as basic in the treatment. He begins to realize that most of those who have been there longer than he are aware of a clinical improvement and a more mature outlook on life. He reads in the Center's newspaper, put out by the veterans themselves, of the successful occupational and training program adjustments of alumni.

The activity therapy consists of a recreational therapy department, an occupational therapy department, and a physical education department, each conducted under the leadership of specialists. All activities are prescribed on the basis of a psychodynamic orientation to the patient's personality problems. It has been determined that it is possible to prescribe activities for the encouragement or participation in group activity composed of men, or men and women, for the development of qualities of leadership and the acceptance of responsibility, for the cultivation of ease in the utilization of talents in an exhibitionistic role, and for training in working for the good of a group rather than one's own aggrandizement. In the physical education department it has been possible to prescribe activities which provide for participation in rough and aggressive play, for competition, for the development of sportsmanship and skills and body confidence, and for improving general health and hygiene. In the craft department it has been possible to prescribe crafts which improve work habits, develop skills, develop an ability to complete a task, and which arouse pride in achievement. In the arts department the veteran is given an outlet for his creative impulses and his imagination.

The psychiatrist administers psychotherapy with both direct and indirect techniques. Direct techniques include individual psychiatric interviews or group psychotherapy sessions. These are analytically oriented, when indicated. Analytically oriented group psychotherapy is alternated with sessions of dramatized psychodynamics. The indirect techniques include the prescription of activities for each patient based on a psychiatric examination and the

analysis of tensions and frustrations that occur due to the carrying out of these prescriptions and the integration of the work between the activity specialists, the psychiatric nurses, and psychologists, and the social workers. As in any analytic psychotherapy, diagnosis and therapy go hand in hand.

In this paper we are concerned only with treatment developed at the Center as it is used to rehabilitate those with hostile dependent behavior or other defenses against their dependence. In so much as we only accept for admission patients whose psychoneurosis or mild psychosis does not permit them to work, the presence of dependent features requiring consideration is frequent. Patients able to continue work are given psychiatric interviews in the night clinic.

It has been our experience that patients who have been treated at the Center with strong reactions against dependence go through three stages of alteration in their behavior before returning to work. In the first stage, upon admission, they may show a restless desire to leave, giving the rationalization that they must return to work and accept responsibility. They know they can leave of their own volition, yet they need the permissivity of the psychiatrist to enable them to stay and accept the offered dependence. For less severe cases, in this first stage, there is an immediate alleviation of anxiety and depressed feelings due to the initial gratification of dependent impulses. In the second stage, the deep analytic psychotherapy stage, tensions which arise out of participation in the various activities, out of the contacts with the other veterans and the staff, and out of visits with family and friends are noted and analyzed. On the basis of psychologic orientation gained, further activities are prescribed. Often a patient will act out his emotional reactions as he does in civilian life. This acting out behavior has diagnostic value, and also offers a basis for additional interpretation. During this second stage, a careful analysis of the character of the patient will reveal special problems. One of the most frequent of these special problems is the problem of the veteran who represses his hostility due to the fact that his character does not permit him to show this emotion. Only rarely have I seen repression of aggressions in industrially injured psychologically protracted convalescents. Individuals with this character formation usually do not get as far as the psychiatrist's office. The tendency to repress their hostility because of guilt and fear causes them to accept early settlements or go back to work when they are confronted with society's rejection of hostile behavior. At the Veterans' Rehabilitation Center veterans who show such repression of their hostility are treated by progressively exposing them to activities which bring out their aggressions. As these aggressions are exhibited, the tension associated with the repressing force is analyzed. At the end of the second stage they are able to show their aggressions or hostility with much less tension or guilt. They are then ready for discharge. In the third stage, patients begin to get a recurrence of symptoms and show hostility toward the staff when they are told they must prepare to leave the Center and return to work. They regard a discharge as a rejection, or a premature move towards being put on their own two feet. These hostility and rejection feelings are repeatedly analyzed, and after this final interpretative phase of the treatment the patient is able to return to work. It is important to note that without the analysis of the hostility at this time the treatment cannot be completed. In some instances, it is necessary to have the veteran return for group psychotherapy on an out-

patient basis even after he has returned to work. This procedure permits a more gradual weaning, and at the same time produces desirable character changes through additional recognitions gained.

During his entire stay at the Center, the veteran is made conscious of the goal of the treatment, that of rehabilitation in terms of personality change and work adjustment. Work is first presented to him as play, later as art, and finally as socially desirable enterprise. Final work adjustment is based on an integrated recommendation formulated by the psychologist, social worker and the psychiatrist.

Veterans at the Center show a much healthier attitude toward an activity program than do the industrially injured with a psychologically protracted convalescence. Fifteen years of experience with a psychologically oriented recreational and physical education program of treatment for the industrially injured patients has indicated that the large majority of such patients are allergic to any activity that would presume they are able to work. Frequently, when they do cooperate, they will participate in the activity program only when not under the observation of the psychiatrist. This behavior is related to their conflictual wish to deny their dependence reinforced by the medicolegal factors involved.

The program at the Center does not benefit all veterans in the same way. Some gain most through temporary gratification of their dependent wishes coordinated with an opportunity to regain their self-prestige through work and play. Some get the greatest gain by the relief from tension attendant upon being given insight into the psychologic nature of their problem, and the tolerant, understanding attitude of the Center towards this problem. Some gain largely through an analysis of their problems in human relationships which are developed at the Center. Some gain progressively as their activities are directed into heretofore forbidden channels. For some the maximum gain is in the influence of the group on their actions and reactions.

It is believed that the psychotherapeutic lessons learned at the Center offer an answer to the parallel problem in industry presented by the injured workmen with a psychologically protracted convalescence. However, before psychiatry can make use of these new psychologic techniques in rehabilitation, state compensation laws must be investigated by a commission composed of psychiatrists, industrial physicians and surgeons, labor leaders and insurance men so that revision can be made to utilize the psychiatrist as a therapist rather than a medicolegal diagnostician.

Abstracts From Current Literature

PYRIDOXINE (VITAMIN B6) IN GRANULOCYTOPENIA. Cantor, M. M. and Scott, J. W.: *Can. Med. Assoc. Jour.*, 1945, 52: 368.

Cantor and Scott point out that the list of drugs likely to cause granulocytopenia has been lengthened year by year and now includes a number of coal tar derivatives, the barbiturates, the sulfonamides, gold salts and thiouracil. They report 3 cases of granulocytopenia successfully treated with pyridoxine (vitamin B6). The pyridoxine was given daily by intravenous injection in doses of 125 or 200 mg. The material used was a 10 per cent solution of pyridoxine hydrochloride in isotonic solution of sodium chloride. This was put up in 10 cc. rubber capped vials and autoclaved for 30 minutes at 15 pounds pressure. The rapid and uniform response observed in these cases leads the authors to suggest that pyridoxine is the factor in liver and liver extracts responsible for the granulocytopenic effect noted when liver is administered in granulocytopenia. Pyridoxine produces granulocytopenia by an effect of the myelocytic elements of the bone marrow. It seems probable that pyridoxine is the factor involved in the maturation and emigration of the polymorphonuclear leukocyte.

BACTERIOLOGIC ASPECTS OF PENICILLIN THERAPY. Selbie, F. R., Simon, Rosemary D., and McIntosh, J.: *Jour. of Path. and Bac.*, 1945, 57: 47.

Research on the clinical application of penicillin gave Selbie and his associates the opportunity of studying this subject from the bacteriologic point of view. They found that *Staphylococcus aureus* is in the great majority of cases sensitive to penicillin, but variation was shown in the degree of sensitivity: 15 of 157 strains were at least eight times less sensitive than the standard strain. *Streptococcus pyogenes* and pneumococci were usually sensitive and showed only minor variation in susceptibility. Some of the nonhemolytic streptococci showed considerable resistance. The 10 strains of Actinomyces were less sensitive than the Oxford staphylococcus, but the majority were within the therapeutic range of penicillin. Observations on penicillin blood levels indicate that a dose of 20,000 units given intramuscularly every three hours will maintain a bacteriostatic concentration sufficient to deal with all sensitive organisms likely to be encountered. The penetration of penicillin from the blood into cavities and in particular the subarachnoid spaces (cerebrospinal fluid) is at times insufficient and has to be supplemented by direct injection. A good indication of improvement in pyogenic infections is a diminution in the blood leukocyte count. The rate of disappearance of the microorganisms depends largely on the nature of the lesion. In acute infections they disappear as a rule in a few days but persist longer in deep foci and in areas of devitalized or necrotic tissue. This persistence is especially characteristic of lung infections, where they appear to have a purely saprophytic existence. Secondary invasion by penicillin insensitive organisms is liable to occur, especially in wounds sustained in battle or in air raids. The development of resistance to the drug was observed in a small number of instances.

WAR-TIME TOXIC DIFFUSE GOITER. Gattig, W.: Arch. Chirurg., 1944, 205: 580.

War-time toxic diffuse goiter does not represent a specific form of toxic diffuse goiter as to origin, clinical aspect, treatment or prognosis. A single physical exertion or a single instance of mental excitement, as well as prolonged mental or physical strain continuing for weeks or months, may be the eliciting factor in soldiers and in civilians alike. Toxic diffuse goiter must have been latent in these persons, since a specific change in the thyroid depending on an individual predisposition is to be considered as the principal cause of the disease. The incidence of fully developed toxic diffuse goiter was low during the first world war and has proved the same during the recent conflict. The incidence of mild forms has been high, and differential diagnosis from purely nervous heart disorders, and disturbances of circulation may be difficult. As observed by Gattig, in 4 of 5 soldiers the toxic diffuse goiter presented a gradual development of medium severity within one year. In the fifth soldier the sudden onset of the disease could be traced to the fact that he was buried under the falling fragments of a shelter which had been hit by artillery shell. In three civilian patients the night bombardment of their homes was the eliciting cause of the disease, which developed within a few days after the bombardment. A mortal fear reaction however was missing in one instance at least in which the patient immediately regained his self control by helping to save other persons from the wreckage. Treatment of war-time toxic diffuse goiter does not differ from the usual treatment, but the results of Plummer's treatment, as well as the recovery rate, are less satisfactory in secondary toxic diffuse goiter in war-time than in primary toxic diffuse goiter.

MECHANISM OF SHOCK FROM BURNS AND TRAUMA. Fox, C. L. and Keston, A. S.: Surg., Gyn. and Obs., 1945, 80: 561.

Fox and Keston used radioactive sodium to explore whatever changes might occur after shock from burns or trauma. Two types of experiments were conducted. In one type animals were prepared with radiosodium given in isotonic solution of sodium chloride so that the body sodium was in equilibrium with and tagged with the isotope. Shock was produced twenty hours later, and the concentration of radiosodium in the tissues and organs was determined in the animals during shock but not when moribund. In a second type of experiment shock was produced first and the animals were then treated with isotonic saline solution containing some radiosodium. About twenty hours later, on recovery from potentially fatal shock (as judged by death of untreated controls), the concentration of radiosodium was determined in tissues and organs. The water content of all tissues sampled was also measured by drying the tissues at 110 C. for eighteen to twenty-four hours. Similar analyses were performed in parallel control animals which had not been injured but which had received equal doses of radioactive sodium. The experiments were made on mice. They demonstrated the great accumulation and side tracking of sodium in injured tissues with subsequent reduction in plasma volume characteristic of traumatic shock. Conversely, treatment with an amount of isotonic sodium solution approximating one-half the extracellular volume restored this volume. This explains the successful treatment of shock in animals and in man with large volumes of isotonic solutions of sodium salts.

TESTOSTERONE PROPIONATE IN MAMMARY CANCER. Prudente, A.: Surg., Gyn. and Obs., 1945, 80: 575.

Prudente used testosterone as a postoperative measure in treating 63 patients with mammary cancer who had previously been operated on. As controls, 64 cases are reported in which the breast had been removed by the same technic of radical surgery and in which testosterone propionate had not been used. All 127 cases were operable. The results obtained, as gauged by the survivals of three, four and five years, are about 100 per cent better than those observed after operation only. This fact indicates that testosterone propionate exercises a protective or prophylactic action against recurrences of surgically treated mammary cancer. Very high doses of testosterone propionate, up to 175 mg. a week, may and should be used after operations for mammary cancer, and this treatment should be continued through many years. The principal criterion for the selection of the dosage is the grade of histologic malignancy of the tumor. The side effects following this therapy are of secondary importance. They consist of virilization and of disturbances of menstruation. In patients between 40 and 50 years of age who are still menstruating, early cessation of menstruation is often observed.

CAUSALGIA. Mayfield, F. H. and Devine, J. W.: Surg., Gyn. and Obs., 1945, 80: 631.

Mayfield and Devine report 15 cases of causalgia found among a group of 737 peripheral nerve injuries. The nerve lesion was incomplete in each case of causalgia. This syndrome has not been seen in any individual in whom the nerve was completely divided. Burning pain was a constant complaint and was usually immediate in onset. The median or sciatic nerve was involved in each instance. Certain patients showed vasoconstriction in the causalgic limb; others showed vasodilatation. The trophic changes and response to warm or cold moisture and to hyperthermia varied, depending on the blood flow. Twelve patients were relieved by sympathectomy of the involved limb; one was cured by artificial fever therapy and two recovered spontaneously. Direct surgical attack (neurolysis) on the injured nerve, which was performed in five cases, and periarterial sympathectomy at the level of the injury, performed in three, have not been of benefit. Procaine block of the sympathetic chain affords complete relief temporarily and should be repeated two to three times, although no case in this series has shown any lasting relief from this procedure. Sympathectomy (preganglionic) gave immediate and lasting relief to twelve patients. Sympathectomy should be done early to prevent stiffness of joints due to disuse. The personality changes present during the painful stages are secondary to the pain. There is no evidence in these cases that there is a predisposing constitutional psychic factor in causalgia.

FUNCTIONAL ENURESIS IN THE ARMY. Shlionsky, H., Sarracino, L. R. and Bischof, L. J.: War Med., 1945, 7: 297.

Shlionsky and his co-workers report observations on 100 men with functional nocturnal enuresis whom they studied in an army training camp in the United States. They found that the educational and occupational background of these men was in general below average. Most of the men had

lived in rural communities and had used outdoor toilets in childhood. There was a high incidence of enuresis in the immediate families of these soldiers. A considerable number gave a history of disruption of the home or of exposure to various other unfavourable types of environment in childhood. A relatively high percentage of the men were below average intelligence. The majority manifested in addition to the enuresis various neurotic tendencies and personality disorders. Most of the men showed evidence of emotional immaturity. Not infrequently there was persistence or recurrence of some of the various neurotic traits of childhood, such as nightmares, nail biting, stuttering, fear of the dark, sleepwalking and talking in the sleep. Functional backache was a common symptom. Virtually none of the patients had ever received adequate medical attention for the enuresis prior to army service. Functional enuresis is generally but one manifestation of a lifelong pattern of neurotic behavior or personality maladjustment and is not infrequently associated with adequate intelligence. Apart from the consideration that the symptom of enuresis itself creates a difficult situation in the service, it is apparent that the majority of enuretic adults do not possess the qualifications necessary for the successful performance of duty in the armed forces.

TREATMENT OF AMEBIASIS. Adams, A. R. D.: *Trans. Roy. Soc. Trop. Med. and Hyg.*, 1945, 38: 237.

According to Adams, large numbers of men overseas are being exposed to infection with *Endameba histolytica*. Some suffer from gross clinical attacks of amebic dysentery, others give no such history but are found to be infected on routine examination of the stools. The author thinks that it is improper to neglect a detected infection with *E. histolytica* until clinical manifestations make their appearance. To do so is to condemn many patients to subsequent unnecessary ill health with the possible development of a major disaster such as an amebic liver abscess. Furthermore, such patients are liable to disseminate the infections to others. They should be regarded as latent cases requiring early treatment. To discover these infections necessitates routine repeated stool examination. Emetine has a more specific reaction on this infection than any other drug. Emetine alone by injection will not sterilize an infection in more than a minority of cases; if it is given unwisely the infection becomes resistant to the drug in all forms and less amenable to treatment. Therefore the use of emetine by injection should be restricted to the control of clinically acute manifestations, and the minimum amount necessary to achieve this end should be given. The eradication of an intestinal infection must be attempted by the use of a variety of drugs, including emetine preparations, all of which have some action on the infection. These drugs should be given together because their combined effect is greater than that of any single drug alone, and they must be given as early as possible over an adequate period. Three weeks of such treatment ensures a high proportion of cures in cases not previously repeatedly treated subcuratively.

PROPHYLAXIS AND TREATMENT OF RICKETS. Krestin, D.: *Arch. of Dis. in Child.*, 1945, 20: 28.

Krestin discusses the results of the routine administration of cod liver oil containing from 600 to 800 international units of vitamin D to the drachm

(4 cc.), for the protection against rickets, and of this oil and a more concentrated preparation of vitamin D for infants with active rickets. In a series of controls under 12 months of age receiving no protective vitamin, two-thirds developed rickets, whereas in a similar series between 1 and 2 years old only 10.7 per cent developed the disorder. Control children over 2 years all remained free during the six months of observation. A daily dose of 1 drachm of cod liver oil (600 to 800 international units) failed to protect two-thirds of infants under 6 months. Two drachms, or 1,500 international units, protected most and 3 drachms, or 2,100 international units, all infants under 1 year. About 11 per cent of infants between 1 and 2 years receiving 1,500 international units daily developed rickets, but all remained free on 3,000 international units. Infants under 1 year showing mildly active rickets were cured on 1,500 units of cod liver oil daily. Those between 1 and 3 years appeared to require doses up to 3,000 units. All infants showing severe rickets responded well to daily doses of 3,250 units in a concentrated preparation.

E. DAVID SHERMAN, M.D.
Abstract Editor

Personal Interest Notes

DOCTOR N. G. PRITCHETT, who graduated from the Dalhousie Medical School on January 5, 1943, has been appointed resident physician of the Halifax Tuberculosis Hospital. Doctor Pritchett is a native of Newfoundland, and has been in the Army since graduation.

Doctor T. C. C. Sodero, who recently received his discharge from the R.C.A.M.C., as a major, and who formerly practised in Guysborough, is at present in Toronto.

Doctor J. Arnold Noble of Halifax has accepted the appointment of Director of Surgery, Camp Hill Hospital.

Doctor R. W. M. MacKay, Superintendent of the Nova Scotia Hospital at Dartmouth, and Doctor R. O. Jones of Halifax attended the annual meeting of the American Psychiatric Association in Chicago from May 26th to 30th.

The BULLETIN extends congratulations to Doctor and Mrs. C. G. MacKinnon of Halifax on the birth of a daughter, Heather Ann, on May 28th. Also to Doctor and Mrs. J. A. Muir of Truro on the birth of a daughter, Margaret Jane, on May 31st.

Doctor R. H. Fraser of New Waterford, is planning to open an office in Antigonish early in 1947. He is an eye, ear, nose and throat specialist, and is at present on post-graduate work. Doctor Fraser graduated from the Dalhousie Medical School in 1932 and practised in New Waterford until he joined the Army in 1942. During the past year Doctor Fraser has been at the University of Toronto and in September will proceed to New York to spend six months at the New York Polyclinic. In 1942 Doctor Fraser was elected a Fellow of the American College of Surgeons, and in the following year he received a certificate in public health work from the University of Toronto.

Doctor V. D. Schaffner of Kentville and Doctor J. J. Quinlan of the Nova Scotia Sanatorium staff at Kentville, attended a meeting of Thoracic Surgeons at Detroit, Michigan, early in June.

Doctor and Mrs. S. W. Williamson of Yarmouth enjoyed a trip to Upper Canada and Providence, Rhode Island during the latter part of May and early in June.

Doctor and Mrs. E. A. Brassett of Antigonish attended the wedding of Doctor J. J. MacNeil and Miss A. P. McGuigan in Toronto on May 4th. Doctor MacNeil is a brother of Mrs. Brassett.

Surgeon Commander H. S. Morton, son of Doctor C. S. Morton of Halifax, received the O.B.E. at an investiture by the Governor-General at McGill

University in May. Commander Morton's citation reads: "For most valuable and efficient services as Principal Medical Officer on the West Coast where he served for three years. In addition he prepared important papers on medical and surgical matters which were distributed to the armed forces overseas."

The marriage took place in Halifax on June 5th of Miss Laura Maria MacKenzie, only daughter of Mr. and Mrs. Kenneth MacKenzie, Halifax, and Doctor Claude Moore Leighton, elder son of Doctor and Mrs. G. T. Leighton, Moncton, N. B. The bride received her Bachelor of Science degree from Dalhousie University and for the last two years has been employed as Bacteriologist at Camp Hill Hospital. Doctor Leighton received his Bachelor of Science Degree from Dalhousie University and his M.D., C.M. on September 1, 1943. He has been overseas for the last two years, serving in England and on the continent, and while there received the honour of Mention in Dispatches. Doctor and Mrs. Leighton will reside in Shediac, N. B.

Doctor J. E. LeBlanc of West Pubnico attended the Medical Congress at Quebec the middle of June.

Doctor C. A. Donkin of Bridgewater received a bad shaking up when he was involved in a car accident on the St. Margaret's Bay Road, near Lewis Lake, on May 30th.

Doctor J. W. Smith of Liverpool, who is in his 81st year, but still actively practising, received a twilight lamp as a mark of esteem from the Liverpool Kiwanians at a meeting on May 20th.

Major I. R. Gold, (Dalhousie 1938), of the United States Medical Corps, who helped save Japanese Premier Tojo's life after the oriental leader's attempted suicide failed, was a recent visitor in Halifax. Major Gold is a native of Glace Bay, but was in New York when the war broke out and joined the United States Army in 1940.

On April 24, at the Nova Scotian Hotel, Halifax, Doctor H. K. MacDonald was the guest of honour at a dinner given by the Halifax Medical Society.

The dinner, which was one of the most largely attended meetings of the Society, was in celebration of Doctor MacDonald's fiftieth anniversary in the practice of medicine.

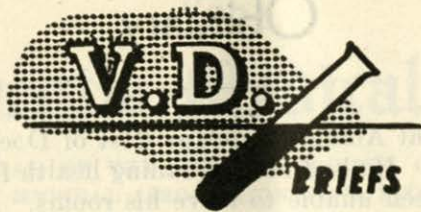
Graduating from McGill University in 1896, Doctor MacDonald first practised in Lunenburg, and then in Halifax, where he is Professor of Surgery and Head of the Department of Surgery. He was, until recently, Senior Surgeon at the Victoria General Hospital and is now a Consultant in Surgery to that institution.

Doctor A. E. Blackett, President of The Medical Society of Nova Scotia, represented that body; Doctor J. G. MacDougall, the Nova Scotia Medical Board; Doctor H. G. Grant, Dalhousie University; Doctor J. J. MacRitchie, the Department of Public Health; and Doctor C. M. Bethune, the Victoria General Hospital.

Doctor G. H. Murphy proposed the toast to Doctor MacDonald who, in reply, spoke of many interesting occurrences during his fifty years' practice.

Others who spoke during the evening were Doctors C. S. Morton, V. O. Mader, S. R. Johnston and M. G. Burris.

At the close of the dinner, Doctor N. H. Gosse, President of the Halifax Medical Society, presented Doctor MacDonald with a gold watch, suitably engraved, as a memento from the profession, on his celebration of his Golden Jubilee in the Profession.



FUNCTIONS OF FEDERAL AND PROVINCIAL VENEREAL DISEASE CONTROL DIVISIONS

I. Department of National Health and Welfare

The role of the Federal Division of Venereal Disease Control is to give leadership in reducing the menace of venereal infections in Canada:

- (a) By planning, in consultation with the provinces, adequate control measures on a comprehensive, effective basis;
- (b) To assist in the implementation and carrying out of the plans for the annual provision and distribution of federal grants;
- (c) To perform the functions of co-ordination, integration, standardization, survey and appraisal, and general exchange of administrative ideas by consultation and conferences with the provinces and national agencies and groups;
- (d) To assist in the provision of lay and professional information services; and
- (e) To encourage research and improve training facilities for professional personnel.

II. Provincial Departments of Health

All Provincial Divisions of Venereal Disease Control offer the same general type of service with slight modification to suit local conditions. These services may be briefly described as follows:

- (a) Collection of statistics on the incidence of venereal disease;
- (b) Provision of laboratory facilities for the diagnosis of venereal disease;
- (c) Maintenance of provincial clinics for the free treatment and diagnosis of venereal disease;
- (d) Distribution of medication to physicians for the treatment of their patients;
- (e) Epidemiological investigation by social service workers of persons who are named as contacts to cases of venereal disease;
- (f) Case-finding of venereal disease through blood test and medical examination of special groups such as prostitutes;
- (g) Application of "Venereal Disease Control Act" in cases where patients with venereal disease in a communicable form refuse to take treatment;
- (h) Education of the population on venereal disease.

Obituary

THE death occurred at Amherst on May 21st of Doctor Charles Alexander Simpson McQueen. He had been in failing health for some time and during recent weeks had been unable to leave his rooms. Doctor McQueen was a member of the well known family of that name of Shediac and was born in 1860. He graduated from the Jefferson Medical College in 1882, and in 1888 received the M.R.C.'s degree from the University of London, England. His first practice was in River Hebert some sixty years ago but a short time later he went to Amherst and was a constant practitioner there until about five years ago. He was a skillful surgeon and kept abreast of the advances in his profession and was particularly noted for his cheerful disposition. He travelled extensively and was held in high regard by his colleagues and had their confidence to an unusual degree. He was generous to every cause that appealed to him and was a steady benefactor of Highland View Hospital in Amherst. He was one of the three donors to contribute \$10,000 each to the rebuilding of that institution in 1928. Doctor McQueen was an honorary member of The Medical Society of Nova Scotia. Doctor McQueen was never married.

The death occurred in Halifax on May 19th of Doctor John James at the age of 77. Doctor Smith was born in Merigomish, Pietou County, and spent the active days of his medical practice in Newfoundland. He was several years at Tilt Cove and moved to Botwood in 1898. Later he transferred to Bishop's Falls. He retired in 1930 and went to Windsor and in 1941 moved to Halifax. Surviving, besides his wife, Georgia Elspeth, are one daughter, one sister and five brothers. Burial took place in Amherst on May 21st.

Doctor George Ockley Hutchinson of Halifax died at the Prince of Wales Naval Hospital at Plymouth, England, on June 2nd. Doctor Hutchison, medical officer aboard the Cable Ship Lord Kelvin, was taken ill while the ship was in the Bay of Biscay, and taken to Plymouth. He was 70 years old and had seen much service in service hospitals. He was born in Toronto, son of a Methodist minister. He went to school there and graduated from Trinity College in 1899 and practised in Toronto for three years. From Toronto he came to Nova Scotia and opened an office at Gabarus, Cape Breton and came to Halifax about eighteen years ago. During the first Great War he served in the Army as a Captain in the C.A.M.C. He was associated with the Navy for eighteen years, and had been medical officer aboard the Lord Kelvin for about seven years. He also saw some service aboard the Cyrus Field, another of the cable ships.

Doctor Hutchison was twice married. His first wife was Maud Ormston of Gabarus, and of that marriage there was one daughter Margaret Hutchison of Halifax. His second wife was Viola Mann, and of the second marriage six children, all at home survive. Also surviving are one sister and two brothers.